

# FUDS Military Munitions Response Program

Mark Seebeck  
CEMP-CED  
(202)761-0299  
[mark.seebeck@usace.army.mil](mailto:mark.seebeck@usace.army.mil)

Jeff Waugh  
CEMP-CED  
(202)761-7263  
[jeffrey.h.waugh@usace.army.mil](mailto:jeffrey.h.waugh@usace.army.mil)



US Army Corps of Engineers  
**BUILDING STRONG®**

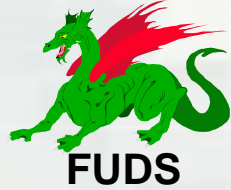


Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE <b>JUN 2010</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2010 to 00-00-2010</b>	
4. TITLE AND SUBTITLE <b>FUDS Military Munitions Response Program</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>US Army Corps of Engineers,CEMP-CED,441 G Street NW,Washington,DC,20314-1000</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES <b>Presented at the NDIA Environment, Energy Security &amp; Sustainability (E2S2) Symposium &amp; Exhibition held 14-17 June 2010 in Denver, CO.</b>					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>15</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			





# Topics For Discussion

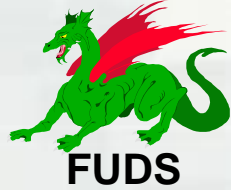


- Achievements
  - ▶ SI Milestones
  - ▶ Innovative Technology
  - ▶ FUDS GIS
- On Going Actions
  - ▶ Interim Risk Management
- Future Direction
  - ▶ MMRP Strategy
  - ▶ MMRP Sequencing





# Achievements



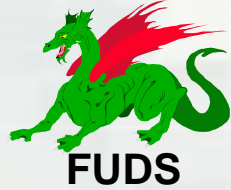
- **Completed 787 MMRP-SI's**
- **Completed Actions at 561 sites**
- **Innovative technologies**
- **FUDS GIS**



---

**BUILDING STRONG®**

# MMRP Innovative Technology FY09



## New/Emerging Technologies demonstrated at eight FUDS

Spring Valley  
Plum Tree Island  
Martha's Vineyard  
Pole Mountain

Camp San Luis Obispo  
Great Salt Plain Bombing Range  
Pine Ridge Gunnery Range  
Lowery Gunnery & Bombing Range

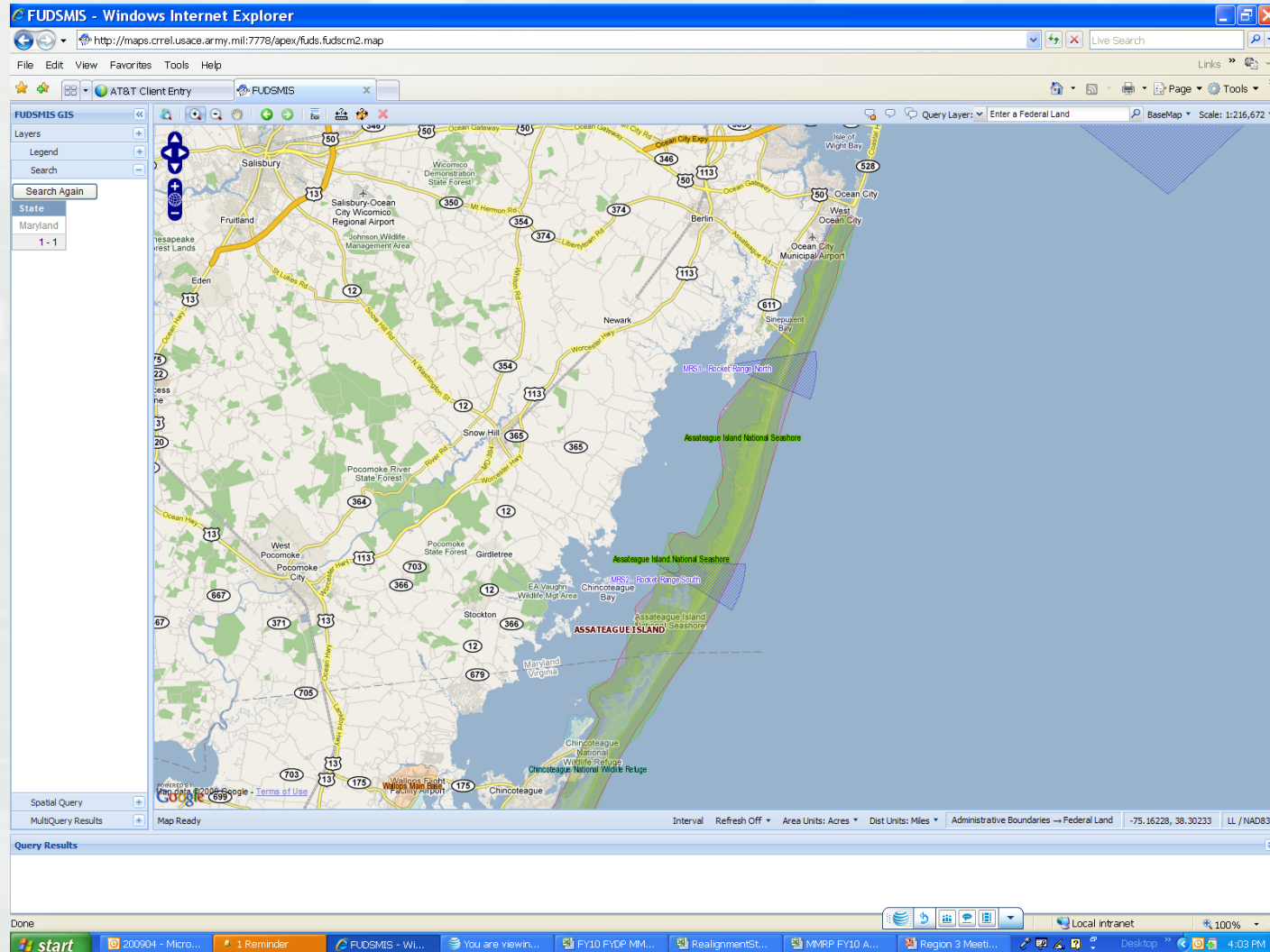
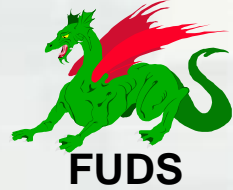
## Sixteen technologies demonstrated

- VSP
- Innovative Materials Handling
- Autonomous Robotics
- GPR supporting decision rules
- Underwater EMI sensor
- Side Scan Sonar
- Real-time underwater video
- Phytoremediation of Arsenic
- Advanced EMI and Multi-component Sensors (4 types)
- Advanced Anomaly Classifications (4 types)

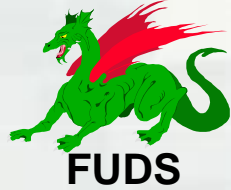


# FUDS GIS

[https://environment.usace.army.mil/what\\_we\\_do/fuds/](https://environment.usace.army.mil/what_we_do/fuds/)



**BUILDING STRONG®**



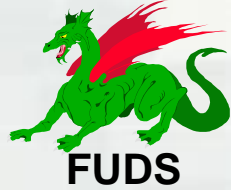
# On Going Actions

- Implement MMRP Interim Risk Management
- Fund High Visibility Projects
- Focus On Completing On-going Remedial And Removal Projects
- Limited New Starts for RI's





# FUDS Interim Risk Management



## ▪ Continuing Efforts

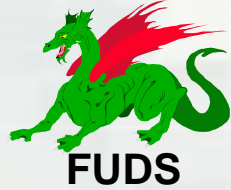
- ▶ Presenting a UXO safety display at this years County Agencies Meeting
- ▶ PAOs use UXO 3R's Safety information at public meetings on MMRP projects, including meetings held specifically for the SI Program
- ▶ Maintaining web page with a link to the DENIX safety education page
- ▶ Updating public GIS website with property polygons sent in from the field

## ▪ New and Future Efforts

- ▶ Developing an outline and schedule for responding to elements (i.e. community outreach, notification, safety education, construction support) of program
- ▶ Using MRSP scores to initiate a phased notification program that meets all DoD and DA requirements.
- ▶ Specific outreach ideas being developed are: video games for educating young children about the 3Rs, targeted newsletters, and other updated presentation materials for public meetings



# High Visibility Projects



## ► MMRP

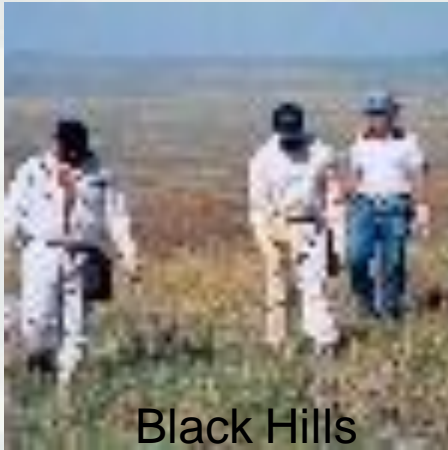
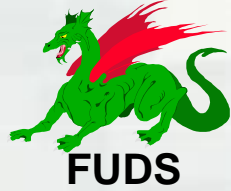
- Sibert, AL
- Camp Wheeler, GA
- Culebra, PR
- Frankford Arsenal, PA
- Orlando Range and Chemical Yard, FL
- Pinecastle Jeep Range, FL
- Spring Valley, DC
- Waikoloa Maneuver Area, HI

## ► HTRW

- West Virginia Ordnance Works, WV
- F.E. Warren Site 4, WY



# On-going Cleanup



Black Hills



Camp Sibert



Plum Tree Island



Dolly Sods



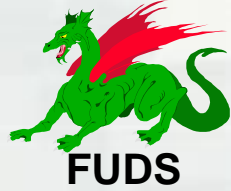
Trabuco



**BUILDING STRONG®**



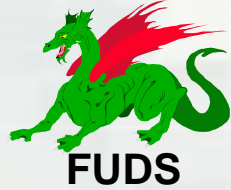
# Future Direction



- MMRP Strategy
- MMRP Sequencing



# MMRP Strategy



## Proposed Goals

### ■ Short-term

- ▶ Implementing MMRP Safety Education
- ▶ Complete currently funded Removal Actions
- ▶ Complete MMRP SI's

### ■ Mid-term

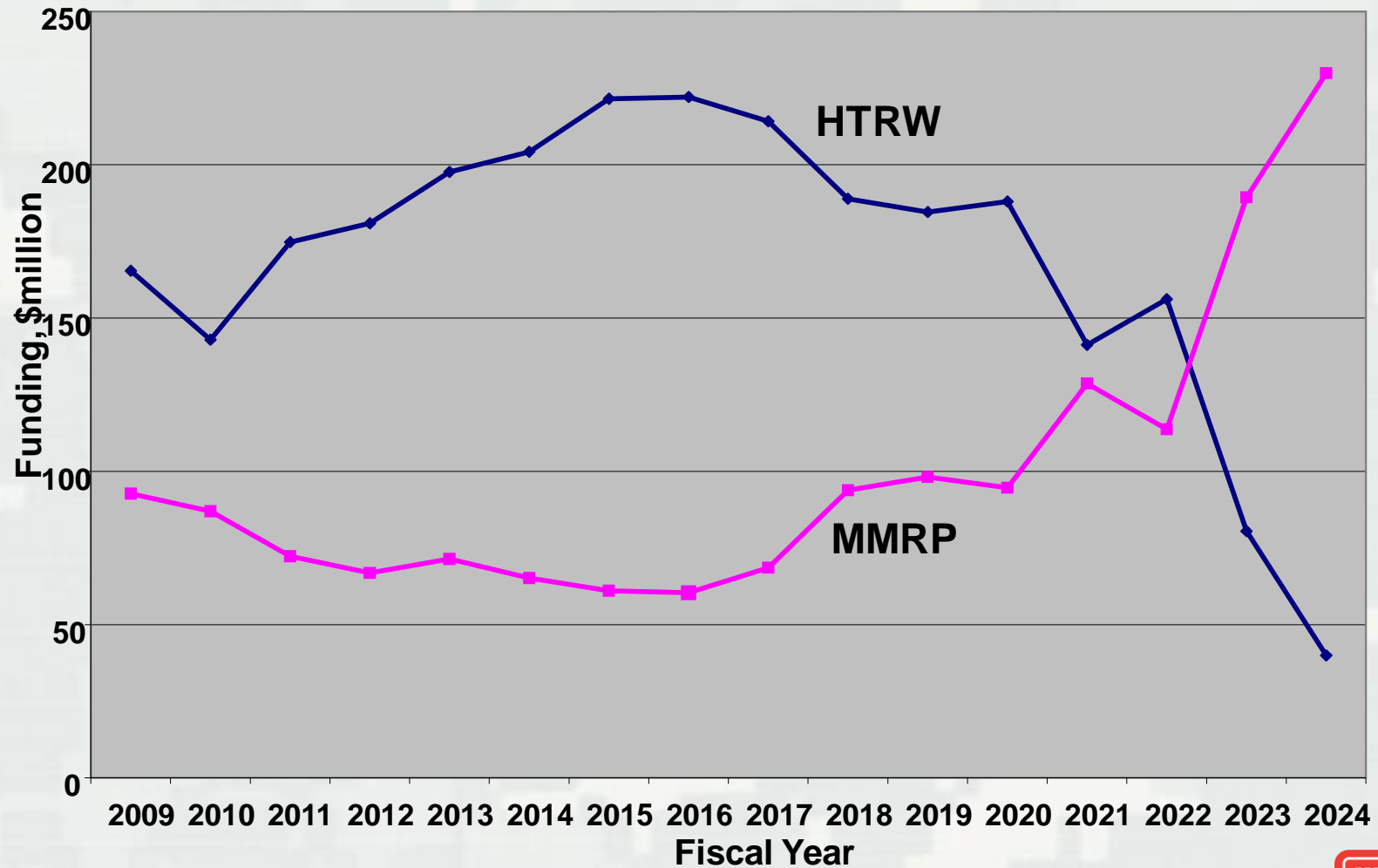
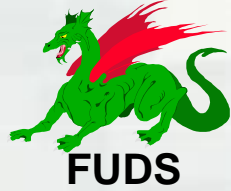
- ▶ Complete On-going Cleanups Initiated Prior to FY10
- ▶ Complete CWM Projects
- ▶ Develop MMRP Program Management Plan

### ■ Long-term

- ▶ Focus On RIP/RC (Cleanup) Not Study (No RI program)
- ▶ Increase MMRP Funding Level



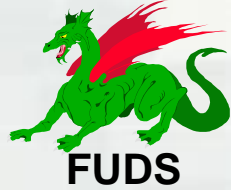
# Transition of Funding (FY09 ARC)



**BUILDING STRONG®**



# Army MRS Sequencing



- The sequencing of MRSs for action shall be based primarily on the MRS priority determined through applying the Munitions Response Site Prioritization Protocol (MRSP). Exceptions include:
  - “Evaluation Pending” MRS – Generally not sequenced for action until the necessary degree of characterization is complete.
  - Ongoing Response Actions (e.g., Time-Critical Removal Actions) – Sequencing for any additional response actions will generally occur after the current action is complete and after MRSP has been reapplied in consideration of the changes in site conditions.
- Risk Plus Factors - The risk-plus factors are to be evaluated on a site-specific basis and should not be considered independently from, but in addition to, the assigned relative priority scores.





The United States Army  
Presents

# Sergeant WOOF

**PROTECT**  
yourself and family,  
friends and community.  
**LEARN and FOLLOW**  
the 3Rs

**RECOGNIZE:** Realize that you may have found ammo  
**RETREAT:** Do not touch, move or disturb it—  
carefully leave the area, but do not run  
**REPORT:** Tell a parent or other adult to call 911

**Recognize**  
**Retreat**  
**Report**

If you **did not**  
drop it,  
**do not**  
pick it up!



*Ilio*  
warns

**DO NOT PICK UP OR TOUCH THESE ITEMS!**



Remember the **3Rs**

**RECOGNIZE:** They are dangerous  
They may burn you or start a fire  
**RETREAT:** Do not pick them up, handle or play with them  
Do not put near fire or heat  
**REPORT:** If you see these items on the beach,  
tell a lifeguard or an adult

**Recognize**  
**Retreat**  
**Report**

## WARNING!

Munitions are dangerous, and may not be easily  
recognizable!  
Never touch, move or disturb a munition!

## REMEMBER THE 3Rs

**RECOGNIZE:** Recognize when you may have  
encountered a munition.  
**RETREAT:** Do not touch, move or disturb it, but  
carefully leave the area.  
**REPORT:** At sea: Use Channel 16 (156.800 MHz)  
On land: Call 911

**Recognize**  
**Retreat**  
**Report**

**DON'T BE TEMPTED!**  
**TOUCHING THESE CAN BE DEADLY!**



## 3Rs of Explosives Safety

Recognize



Retreat

Report



**Recognize**  
**Retreat**  
**Report**

Recognize when you may have encountered a munition.

Do not touch, move or disturb it, but carefully leave the area.

Immediately notify the police if on land, or the U.S. Coast Guard,  
if at sea. Emergency contacts:

• On land: Call 911  
• At sea: Use Channel 16 (156.800 MHz)

<https://www.denix.osd.mil/uxosafety>

# Maritime Industry

3Rs EXPLOSIVES SAFETY GUIDE



**Recognize**  
**Retreat**  
**Report**

# Construction Industry

3Rs EXPLOSIVES SAFETY GUIDE



**Recognize**  
**Retreat**  
**Report**